IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

n re application of:

Percival

Application No.: 10/709,040

Group No.: 2188

Filed: April 8, 2004

For:

A Method and System for Coherently Caching I/O Devices Across a Network

Mail Stop Amendment **Commissioner for Patents** P.O. Box 1450 Alexandria, VA 22313-1450

TRANSMITTAL OF SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BEFORE MAILING DATE OF EITHER A FINAL ACTION OR NOTICE OF ALLOWANCE (37 C.F.R. § 1.97(c))

TIME OF TRANSMITTAL OF ACCOMPANYING INFORMATION DISCLOSURE STATEMENT

- The information disclosure statement transmitted herewith is being filed after three months of the 1. filing date of this national application or the date of entry of the national stage as set forth in Section 1.491 in an international application or after the mailing date of the first Office action on the merits, whichever event occurred last but before the mailing date of either
 - (1) a final action under § 1.113 or
 - (2) a notice of allowance under § 1.311

CERTIFICATION UNDER 37 C.F.R. §§ 1.8(a) and 1.10*

(When using Express Mail, the Express Mail label number is mandatory; Express Mail certification is optional.)

I hereby certify that, on the date shown below, this correspondence is being:

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[x] deposited with the United States Postal Service in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

37 C.F.R. § 1.8(a)

37 C.F.R. § 1.10*

[x] with sufficient postage as first class mail.

□ as "Express Mail Post Office to Addressee"

Mailing Label No.

(mandatory)

TRANSMISSION

☐ facsimile transmitted to the Patent and Trademark Office, (703)

Signature

Date: May 10, 2005

Robert M. Asher

(type or print name of person certifying)

Only the date of filing (§ 1.6) will be the date used in a patent term adjustment calculation, although the date on any certificate of mailing or transmission under § 1.8 continues to be taken into account in determining timeliness. See § 1.703(f). Consider "Express Mail Post Office to Addressee" (§ 1.10) or facsimile transmission (§ 1.6(d)) for the reply to be accorded the earliest possible filing date for patent term adjustment calculations.

whichever occurs first.

FEE

2. Accompanying this transmittal is the fee for submission of an information disclosure statement under section 1.97(c). (\$180.00)

FEE PAYMENT

3. Applicant elects the option to pay the fee set forth in 37 C.F.R. § 1.17(p) for submission of an information disclosure statement under § 1.97(c) (\$180.00).

Fee due \$180.00

METHOD OF PAYMENT OF FEE

4. Attached is a check in the amount of \$180.00 OR Authorization is hereby made to charge the amount of \$180.00 to Deposit Account No. 19-4972.

Charge any additional fees required by this paper or credit any overpayment in the manner authorized above.

A duplicate of this paper is attached.

DATE: May 10, 2005

Robert M. Asher

BROMBERG & SUNSTEIN LLP

Customer Number 02101

125 Summer Street

Boston, MA 02110-1618

US

01348/00111 385326.1

Practitioner's Docket No. 1348/111

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| Patent application of | OIPE |
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| | mtor(s) MAY 1 3 2005 |
| • | invention |
| the specification of which is being transmitted herewi | |
| In re application of: Percival | |
| Application No.: 10/709,040 Group No.: Filed: April 8, 2004 Examiner: For: A Method and System for Coherently Caching I/ | 2188 Namazi, M. O Devices Across a Network |
| Commissioner for Patents P.O. Box 1450 | · |
| Alexandria, VA 22313-1450 SUPPLEMENTAL INFORMATI | ON DISCLOSURE STATEMENT |
| | (Supplemental Information Disclosure Statementpage 1 of 7 |
| (When using Express Mail, the Expr Express Mail certi | C.F.R. SECTIONS 1.8(a) and 1.10* ress Mail label number is mandatory; fication is optional.) |
| I hereby certify that, on the date shown below, this corresponder | LING |
| [x] deposited with the United States Postal Service in an envelope addr 22313-1450 | |
| 37 C.F.R. SECTION 1.8(a) | 37 C.F.R.SECTION 1.10* |
| [x] with sufficient postage as first class mail. | ☐as "Express Mail Post Office to Addressee" Mailing Label No (mandatory) |
| ☐ TRANSI ☐ transmitted by facsimile to the Patent and Trademark Office. | Aghet M. Asha |
| Date: May 10, 2005 | Signature <u>Robert M. Asher</u> (type or print name of person certifying) |
| *WARNING: Each paper or fee filed by "Express Mail" m | sust have the number of the "Express Mail" mailing label placed |

thereon prior to mailing. 37 C.F.R. section 1.10(b).

"Since the filing of correspondence under section 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable C.F.R.e, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

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- NOTE: "An information disclosure statement shall be considered by the Office if filed by the applicant:
 - (1) Within three months of the filing date of a national application;
 - (2) Within three months of the date of entry of the national stage as set forth in section 1.491 in an international application; or
 - (3) Before the mailing date of a first Office action on the merits, whichever event occurs last." 37 C.F.R. section 1.97(b).
- NOTE: "Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section." 37 C.F.R. section 1.56(a).

"Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

- (1) each inventor named in the application;
- (2) each attorney or agent who prepares or prosecutes the application; and
- (3) every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application."

 37 C.F.R. section 1.56(c).
- NOTE: The "duty as described in section 1.56 will be met so long as the information in question was cited by the Office or submitted to the Office in the manner prescribed by sections 1.97(b) (d) and 1.98 before issuance of the patent." Notice of January 9, 1992, 1135 O.G. 13-25 at 17.

WARNING: "No information disclosure statement may be filed in a provisional application." 37 C.F.R. section 1.51(b).

List of Sections Forming Part of This Information Disclosure Statement

The following sections are being submitted for this Information Disclosure Statement:

(check sections forming a part of this statement: discard unused sections and number pages consecutively)

- 1. [x]Preliminary Statements
- 2. [x]Forms PTO/SB/08A and 08B (substitute for Form PTO-1449)
- 3. [Statement as to Information Not Found in Patents or Publications
- 4. []Identification of Prior Application in Which Listed Information, Was Already Cited and for Which No Copies Are Submitted or Need Be Submitted
- 5. []Cumulative Patents or Publications
- 6. [x]Copies of Listed Information Items Accompanying This Statement
- 7. []Concise Explanation of Non-English Language Listed Information Items
 - 7A. []EPO Search Report
 - 7B. []English Language Version of EPO Search Report
- 8. []Translation(s) of Non-English Language Documents
- 9. []Concise Explanation of English Language Listed Information Items (Optional)
- 10. [x]Identification of Person(s) Making This Information Disclosure Statement

(complete the following, if appropriate)

Sections , respectively, have been continued on ADDED PAGE(S).

NOTE: "Once the minimum requirements are met, the examiner has an obligation to consider the information." Notice of April 20, 1992 (1138 O.G. 37-41, 37).

Section 1. Preliminary statements

Applicants submit herewith patents, publications or other information, of which they are aware that they believe may be material to the examination of this application, and in respect of which, there may be a duty to disclose.

The filing of this information disclosure statement shall not be construed as a representation that a search has been made (37 C.F.R. section 1.97(g)), an admission that the information cited is, or is considered to be, material to patentability, or that no other material information exists.

The filing of this information disclosure statement shall not be construed as an admission against interest in any manner. Notice of January 9, 1992, 1135 O.G. 13-25, at 25.

SECTION 2. FORMS PTO/SB/08A and 08B (formerly Form PTO-1449)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Percival

Attorney Docket:

1348/111

Serial No:

10/709,040

Art Group Unit:

2188

Date Filed:

April 8, 2004

Examiner Name:

Namazi, M.

Invention:

A Method and System for Coherently Caching I/O Devices Across a Network

LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

| U.S. PATENT DOCUMENTS | | | | | |
|---|----|-----------------|------------------------------|--------------------|----------------|
| Examiner Reference Docum Initials Number | | Document Number | Document Number Issue Date | | Class/Subclass |
| | EH | US 4,622,631 | Nov. 11, 1986 | Frank et al. | 364/200 |
| | EI | US 4,755,930 | Jul. 5, 1988 | Wilson, Jr. et al. | 364/200 |
| | EJ | US 5,055,999 | Oct. 8, 1991 | Frank et al. | 364/200 |
| - | EK | US 5,210,865 | May 11, 1993 | Davis et al. | 364/200 |

| OTHER DOCUMENTS | | | | | |
|---|----|-------------------|---|--|--|
| Examiner Reference Author Initials Number | | Author | Title of Article, Title of Journal, Volume Number, Page Numbers, Date | | |
| | EL | Blaze et al. | "Long Term Caching Strategies for Very Large Distributed File Systems", pp. 3-15, USENIX, 1991. | | |
| | EM | M. Satyanarayanan | "A Survey of Distributed File Systems", Annual. Review of Computer. Science, Vol. 4, pp. 73-104, 1990. | | |
| | EN | M. Blaze et al. | "Dynamic Hierarchical Caching in Large Distributed File Systems", pp. 521-528, IEEE Computer Society Technical Committee, June 1992. | | |
| | ЕО | T. Mann et al. | "A Coherent Distributed File Cache with Directory Write-behind", Digital Systems Research Center, June 1993. | | |
| | ЕР | G. Delp et al. | "An Analysis of Memnet: An Experiment in High-Speed Shared-Memory Local Networking", pp. 165-174, ACM, 1988. | | |
| | EQ | J. Carter et al. | "Network Multicomputing Using Recoverable Distributed Shared Memory", pp. 519-527, IEEE, 1993. | | |

| E | ER | Kai Li | "Shared Virtual Memory on Loosely Coupled Multiprocessors", A Dissertation Presented to the Faculty of the Graduate School of Yale University, December 1986. |
|---|----|---------------------|---|
| E | ES | E. Hagersten et al. | "DDM-A Cache-Only Memory Architecture", pp. 1-20, Swedish Institute of Computer Science, November 1991. |
| E | ET | Bryant et al. | "Operating System Support for Parallel Programming on RP3", pp. 617-634, September 1991. |
| E | EU | B. Walker et al. | "The LOCUS Distributed Operating System", pp. 49-70, ACM, 1983. |
| E | EV | A. Birrell et al. | "The Echo Distributed File System", Digital Systems Research Center, September 1993. |

| Examiner Signature: |
|--|
| Date Considered: |
| EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. |

Section 6. Copies of Listed Information Items Accompanying This Statement

NOTE: 37 C.F.R. section 1.98(a)(2) requires that any information disclosure statement filed under section 1.97 shall include:

"A legible copy of: (1) Each U.S. and foreign patent; (ii) Each publication or that portion which caused it to be listed;
and (iii) All other information or that portion which caused it to be listed, except that no copy of a U.S. patent application need be included..."

NOTE: The wording in section 1.98(a)(2)(iii) makes it clear that the requirement to submit a copy of each item of information listed in an information disclosure statement does not apply to the citation of a U.S. patent application. Notice of January 9, 1992, 1135 O.G. 13-25, at 14.

Legible copies of all items listed in Forms PTO/SB/08A and 08B (substitute for Form PTO-1449) accompany this information statement.

(complete the following, if applicable)

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|---|----|-------|--------|-----------|----------|----|
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[]Items in prior application, from which an earlier filing date is claimed for this application, as identified in Section 4.

[]Cumulative patents or publications identified in Section 5.

U.S. patent citations are not included pursuant to the United State Patent and Trademarks Office's September 21, 2004 waiver of the copy requirement in 37 CFR 1.98 for cited pending U.S. patent citations when the patent citations are available in the USPTO's IFW system.

Section 10. Identification of Person(s) Making This Information Disclosure Statement

| The person making this certification is | |
|--|---|
| (check ed | ch applicable item) |
| (a) []the inventor(s) who signs below | |
| | SIGNATURE OF INVENTOR |
| | (type name of inventor who is signing) |
| (b) []an individual associated with the fill 1.56(c)) | ling and prosecution of this application (37 C.F.R. section |
| | SIGNATURE OF INVENTOR |
| | (type name of inventor who is signing) |
| (c) [x] the practitioner who signs below or | the basis of the information: |
| (check ea | ch applicable item) |
| [] supplied by the inventor(s | s). |
| - - • | lual associated with the filing and prosecution of this C.F.R. section 1.56(c)). |
| [x] in the practitioner's file. | SIGNATURE OF PRACTITIONER |
| Reg. No.: 30,445 | |
| Tel. No.: (617) 443-9292 | Robert M. Asher (type or print name of practitioner) Bromberg & Sunstein LLP 125 Summer Street; 11 th Floor P.O. Address |
| Customer No.: 002101 | Boston, MA 02110 |
| 01348/00111 384399.1 | DOSION, MIA UZITU |